

Application No. 10/533,819
Amendment under 37 CFR 1.111
Reply to Office Action dated December 13, 2007
March 13, 2008

AMENDMENTS TO THE DRAWINGS

In Fig. 1, the phrase "Infomation processing device" has been amended to "Information processing device". Also, the phrase "Program strage" has been amended to "Program storage". Therefore, please replace the attached first drawing sheet for the original drawing sheet including Fig. 1.

In Fig. 2, the phrase "Infomation recording region" has been amended to "Information recording region". Therefore, please replace the attached Second drawing sheet for the original drawing sheet including Fig. 2.

Attachments: Replacement Drawing Sheets for Figs. 1 and 2

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REMARKS

By this amendment, Figs. 1 and 2 have been amended and claims 1 and 9 have been amended in the application. Currently, claims 1-14 are pending in the application.

As a preliminary matter, on page 2 of the office action, the Examiner stated that the IDS filed May 3, 2005 failed to comply with 37 CFR 1.98(a)(3) because the IDS did not include a concise explanation of the relevance of each patent listed that is not in the English language. Following receipt of the office action, applicants' representative contacted the Examiner. Examiner Bullock indicated to applicants' representative that the U.S. Patent and Trademark Office probably misplaced the cited references and their translations after their previous submission. Applicants respectfully submit that the Resubmission of the IDS filed with this amendment includes all of the same papers, which were previously filed on May 3, 2005, as evidenced by the enclosed a copy of applicants' receipt stamped by the U.S. Patent and Trademark Office mailroom. Applicants respectfully request the Examiner to consider these references and return an

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initialed copy the Form PTO-1449 with the next action on this application.

Claims 1-14 were rejected under 35 USC 102(e) as being unpatentable over Moore et al. (U.S. Patent Application Publication No. 2004/0230599).

These rejections are respectfully traversed in view of the amendments to the claims and the remarks below.

The present invention relates to a file management method for unifying and managing a plurality of information recording media which are individually managed by a file system, and an information processing device using this file management method (see page 1, lines 6-10 of the specification).

In Fig. 1, a system memory 102 is a memory utilized by a program which runs on the information processing device. A program storage 103 is a part for storing an application program and the like that run on the information processing device. A access controller 104 controls access to information recording media 106. An information processing device 100 is provided with the slots 105A, 105B, ... and 105N, to which a plurality of information recording media 106A, 106B, ... and 106N are attached,

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and can access data stored in these information recording media
(see page 9, line 18 - page 10, line 7 of the specification).

Fig. 4 is a diagram showing a configuration of the file system control information. File system control information 400 is formed of slot information 401 and open information 402. The slot information 401 is information for controlling individual file systems constructed within the plurality of information recording media 106. The open information 402 is information on an opened file.

The slot information 401 includes slot numbers, insertion flags, priority order and system information. The insertion flag is a flag indicating whether or not an information recording medium is inserted into each slot. The priority order indicates a priority for use of the slots. The system information is information on file systems constructed within the inserted information recording media. Sets of information of which the number is the same as that of the slots that exist within the information processing device are retained, where one set of information consists of the above-described four pieces of information. System information 403 is information required for accessing a file system constructed within one information

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recording medium. The system information 403 is formed of medium ID, region information, cluster size, sector size, empty region length, FAT memory, update flag and the like (see page 14, line 11 - page 15, line 10 of the specification).

The file system controller 103b of Fig. 1 accesses a file within an information recording medium 105 on the basis of the system information 403. The slot information 401 includes pieces of system information 403 of which the number is the same as that of the slots existing in the information processing device 100. The file system controller 103b switches the system information 403 to be utilized in accordance with the slot number upon accessing each information recording medium 105.

The open information 402 retains pieces of file information 404, which is information concerning the opened files, of which the number is the same as that of the files that have been opened. File information 404 is formed of access information, slot numbers and flags for files having the same name. Access information 405 is information required for accessing a file. The slot numbers are numbers indicating the information recording media which store files. The flags for files having the same

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name are flags indicating whether or not a file having the same file name exists in another information recording medium.

Furthermore, the access information 405 is formed of a file name, file size, attribute of file, starting cluster number, update flag and the like. The starting cluster number is the number indicating the starting position of the region where data of a file is stored. The update flag is a flag indicating whether or not a file is updated. The file system controller 103b of Fig. 1 accesses a file that has been opened on the basis of these pieces of information.

The present invention has features in that the slot numbers which indicate the information recording media 105 where files have been stored and the flags for files having the same name that indicate the existence of a same file name exist in the file information 404 included in the open information 402. In the present invention, if files having the same file name exist in a plurality of information recording media, one file is selected for use in accordance with the priority order stored in the slot information 401. In addition, the priority order of the respective slots can be arbitrarily set according to the

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application, and the application can utilize any desired file (see page 15, line 22 - page 18, line 4 of the specification).

By this amendment, independent claim 1 has been amended to recite "a file system controller which refers to slot information including priority order retained in said file system control information showing a priority for use of a plurality of information recording media, and open information showing information on opened files as well as flags for files having the same name, and which sets said flags and accesses a file in a logical information recording region of said information recording media based on said priority order when files having the same name exist in said plurality of information media".

Similarly, independent claim 9 recites the steps of "setting a utilization priority order for a plurality of slots to which said information recording media are attached, creating slot information in reference to data in a management information region recorded in one said information recording medium and data in a part of a data region when said information recording media are attached to any of said plurality of slots, and producing a part of file system control information through said file system controller, upon opening a specific file from an information

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recording medium, referring to said slot information included in said file system control information and said priority order included in said file system control information, accessing all of the information recording media attached to the slots, confirming whether or not a file that is designated by an application exists, creating open information when a designated file exists, registering a flag that indicates whether or not a file having the same name exists with file information, and thereby, producing the rest of said file system control information, and thus constructing a unified file system where individual systems in said plurality of information recording media are unified through said file system controller". These features are not shown or suggested by Moore et al.

Moore et al. relate to file systems, and more particularly, to a file system shell (see page 1, paragraph [0002]).

Moore et al. disclose that in Fig. 42, a virtual address's selection criteria may reference files stored in a specific location in the file system hierarchy (see page 16, paragraph [0220]).

Moore et al. also disclose that Fig. 44A illustrates manipulating a segment of the virtual address 1404 in the virtual

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address bar 1402 in order to navigate in a computer file system. Each virtual address bar, such as virtual address bar 1402, is comprised of one of more interactive segments, such as segments 1502, 1504, 1506, and 1508 (see pages 16-17, paragraph [0221]).

Moore et al. do not disclose a file system controller which refers to slot information including priority order retained in the file system control information showing a priority for use of a plurality of information recording media, and open information showing information on opened files as well as flags for files having the same name, and which sets the flags and accesses a file in a logical information recording region of the information recording media based on the priority order when files having the same name exist in the plurality of information media as claimed in independent claim 1.

Also, Moore et al. do not disclose the steps of setting a utilization priority order for a plurality of slots to which the information recording media are attached, creating slot information in reference to data in a management information region recorded in one the information recording medium and data in a part of a data region when the information recording media are attached to any of the plurality of slots, and producing a

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part of file system control information through the file system controller, upon opening a specific file from an information recording medium, referring to the slot information included in the file system control information and the priority order included in the file system control information, accessing all of the information recording media attached to the slots, confirming whether or not a file that is designated by an application exists, creating open information when a designated file exists, registering a flag that indicates whether or not a file having the same name exists with file information, and thereby, producing the rest of the file system control information, and thus constructing a unified file system where individual systems in the plurality of information recording media are unified through the file system controller as claimed in independent claim 9.

Applicants respectfully submit that Moore et al. do not refer to a case where a plurality of files with the same name exist in the plural recording media. Specifically, Moore et al. disclose a device with a plurality of information recording media simultaneously attached. Moore et al. also disclose that the files in the recording media can be displayed in a single virtual file system as in the virtual address bar 1402 in Fig. 44A.

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On the other hand, the present invention discloses a priority management system in which one file is selected in accordance with the priority order.

In addition, Moore et al. do not disclose the slot information includes slot numbers, insertion flags, priority order, and system information. More specifically, Moore et al. do not disclose that priority order indicates a priority for use of the slots. Also, Moore et al. do not disclose that the number of the sets of information is the same that of the number of slots that exist within the information processing device where the sets of information are retained. In the present invention, one set of information consists of the above-described four pieces of information.

For these reasons, it is believed that Moore et al. do not teach or suggest the present claimed features of the present invention. Therefore, it is respectfully requested that the 35 USC 102(e) rejection based on Moore et al. be withdrawn.

Applicants also respectfully submit that the features claimed in independent claims 1 and 9 define over the prior art of record and allowance of these claims is respectfully requested.

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Moore et al. also do not disclose many claimed features of the dependent claims.

For example, Moore et al. do not disclose that the file system controller once initializes the file system control information in the system memory where a state is initially set for the application program in a manner that the information recording media are not attached and that all of the files are not open, when the information processing device is turned on as claimed in dependent claim 2. Specifically, applicants respectfully submit that paragraph [0221] of Moore et al. do not disclose the initialization process of the file system control information. The process is for setting that the information recording media are not attached and all the files are not open.

Also, Moore et al. do not disclose that the file system controller sets the use priority order of the slots in advance for the respective slots when the information processing device is turned on as claimed in dependent claim 3. Applicants respectfully submit that paragraphs [0221] and [0220] of Moore et al. do not disclose such features of the present invention.

Also, applicants respectfully submit that Moore et al. do not disclose the claimed features of dependent claims 4, 5, 6-8 and other

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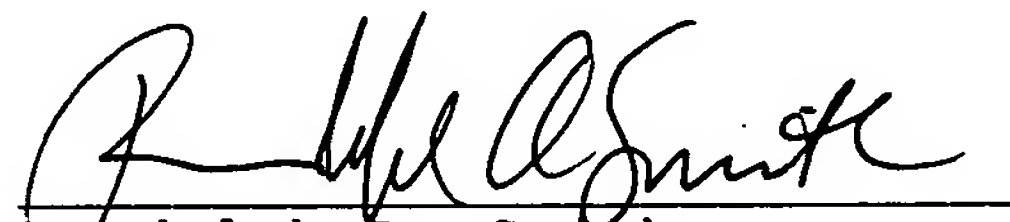
dependent claims. Allowance of these claims is also respectfully requested.

In view of foregoing claim amendments and remarks, it is respectfully submitted that the application is now in condition for allowance and an action to this effect is respectfully requested.

If there are any questions or concerns regarding the amendments or these remarks, the Examiner is requested to telephone the undersigned at the telephone number listed below.

Respectfully submitted,

Date: March 13, 2008


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